



JAN 21 1999

K990132

## Summary of Safety and Effectiveness

**Datex-Ohmeda**

Ohmeda Drive  
P.O. Box 7550  
Madison, WI 53707-7550

Telephone  
608-221-1551

Facsimile  
608-222-9147

Customer Service  
800-345-2700

Product Support  
800-345-2755

Website  
[www.datex-ohmeda.com](http://www.datex-ohmeda.com)

January 13, 1999

**Subject:** 510(k) Summary of Safety and Effectiveness Information for the Datex-Ohmeda D-Tec Anesthesia Vaporizer  
**Proprietary:** Datex-Ohmeda D-Tec Anesthesia Vaporizer  
**Common:** Vaporizer, Anesthesia  
**Classification:** Anesthesiology, 73CAD, 21CFR868.5880

The 510(k) summary of safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 1992.

The Datex-Ohmeda D-Tec anesthesia vaporizer is substantially equivalent to the following currently marketed device:

1. Ohmeda Tec 6 vaporizer - Class II - 21CFR868.5880 73CAD
2. Ohmeda Tec vaporizer - NAD variant - Class II - CFR868.5880 73CAD

The Datex-Ohmeda D-Tec anesthesia vaporizer is device that delivers physician selected concentrations of desflurane anesthetic agent to a flow of medical gases through an anesthesia machine, and to the patient. The spacing of the port valves, helps ensure that the Datex-Ohmeda D-Tec anesthesia vaporizer can only be mounted on Drägerwerk anesthesia systems with a Drägerwerk interlocking manifold.

The Datex-Ohmeda D-Tec anesthesia vaporizer was designed to comply with the applicable portions of the following voluntary standards;

1. EN 740 - Anesthetic Work Stations
2. EN 60601-1, IEC 601-1: 1988 - Medical Electrical Equipment
4. EN 60601-1-2, IEC 601-1-2: 1998 - Medical Electrical Equipment - Electromagnetic Compatibility
5. ISO 5358 - Anesthetic Gas Machines
6. ASTM F1161 - Specifications for Anesthetic Gas Machines

The Datex-Ohmeda D-Tec anesthesia vaporizer and the currently marketed devices are substantially equivalent in design concepts, technologies and materials. The Datex-Ohmeda D-Tec anesthesia vaporizer has been validated through rigorous testing that, in part, support the compliance of the Datex-Ohmeda D-Tec anesthesia vaporizer to the above mentioned standards.

**Datex-Ohmeda**



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

JAN 21 1999

Mr. Daniel Kosednar  
Datex-Ohmeda  
Ohmeda Drive  
P.O. Box 7550  
Madison, WI 53707-7550

Re: K990132  
Datex-Ohmeda Anesthesia Vaporizer, Model D-TEC  
Regulatory Class: II (two)  
Product Code: 73 CAD  
Dated: January 13, 1999  
Received: January 14, 1999

Dear Mr. Kosednar:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

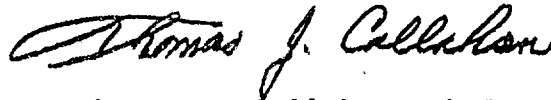
If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic QS inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

Page 2 - Mr. Daniel Kosednar

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4648. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597, or at its internet address "<http://www.fda.gov/cdrh/dsma/dsmamain.html>".

Sincerely yours,

A handwritten signature in black ink, reading "Thomas J. Callahan". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Thomas J. Callahan, Ph.D.  
Director  
Division of Cardiovascular,  
Respiratory, and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

510(k) Number (if known): K 990132

Device Name: Datex-Ohmeda D-Tec Anesthesia Vaporizer

Indications For Use:

The Datex-Ohmeda D-Tec is an electronic vaporizer which delivers the anesthetic agent desflurane. It heats desflurane to maintain temperature and vapor pressure for consistent output. For added convenience and safety, the vaporizer has an LED display which indicates vaporizer status - no output, low agent, warm-up, operational and alarm battery low. The D-Tec attaches to the Dragerwerk interlocking manifold which allows the user to change vaporizer arrangement from case to case or move vaporizers from suite to suite without the need for tools.

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Mark Kramer

(Division Sign-Off)

Division of Cardiovascular, Respiratory, and  
Neurological Devices

510(k) Number: K990132

☒ Prescription Use  
(Per 21CFR801.109)

OR

☐ Over-The-Counter Use  
(Optional Format 1-2-96)